CLAIMS

We claim:

1. A cutting device for plants comprising at least one rotating blade (4a) which cooperates with a stationary counter-blade (13a), the at least one rotating blade being curved and arranged in oblique planes or helical form around a rotation axis of the device, wherein the at least one rotating blade (4a) and/or the counter-blade (13a) is respectively replaceably arranged in a blade support (3a, 14a) and wherein the blade (4a) and/or the counter-blade (13a) is held by a latch or snap connection in its respective blade support (3a, 14a).

2. The cutting device according to claim 1, wherein the blade (4a) and/or the counter-blade (13a) is mounted in at least one slot (5a) of its respective blade support (3a, 14a).

3. The cutting device according to claim 1, wherein the blade (4a) is insertable approximately transversely to its longitudinal extent into at least one slot (5a) of its blade support (3a) and is then lockable in this slot by an approximately axial displacement.

4. The cutting device according to claim 1, wherein the blade (4a) is insertable approximately transversely to its longitudinal extent into at least one slot (5a) of its blade support (3a) and is lockable therein by elastic latching elements (51a, 51b).

5. The cutting device according to claim 2, wherein plural slots (5a) are provided in succession in a peripheral direction.

6. The cutting device according to claim 5, wherein plural slots (5a) run approximately axially.

7. The cutting device according to claim 1, wherein the blade supports (3a) are connectable to a drive shaft (30) by plug-in connections.

8. The cutting device according to claim 7, wherein the plug-in connections comprise axially running slots (20a)

9. The cutting device according to claim 1, wherein the blades (4a) extend only over a peripheral angle of at most 150° of an imaginary circular arc around the rotation axis.

10. The cutting device according to claim 9, wherein the peripheral angle is at most 100°.

11. The cutting device according to claim 1, wherein in a radial plane of the rotation axis more than two blades (4a) are arranged in succession in a peripheral direction.

12. The cutting device according to claim 11, wherein in a radial plane of the rotation axis more than three blades (4a) are arranged in succession in a peripheral direction.

13. The cutting device according to claim 1, wherein axially adjacent blades (4a, 4b, 4c) are oriented partially non-parallel, but oppositely to one another.

14. The cutting device according to claim 1, wherein the at least one blade (4a) and/or the counter-blade (13a) is connected, at its edge respectively situated opposite the cutting edge, to a guide element (6a, 15a), and this guide element (6a, 15a) is replaceably arranged in the blade support (3a, 14a).

15. The cutting device according to claim 14, wherein the guide element (6a) has latching elements, which positively latch to the blade support (3a).

16. The cutting device according to claim 15, wherein two latching elements are provided, respectively latching in opposite directions.

17. The cutting device according to claim 15, wherein the latching elements latch into slot regions (50a) of the blade support (3a), and in the latched state the latching elements partially project from the slot regions (50a).

18. The cutting device according to claim 15, wherein the latching elements comprise elastic fingers (51a, 51b).

19. The cutting device according to claim 14, wherein the guide element (6a, 15a) is made of plastic.

20. The cutting device according to claim 1, wherein the at least one blade (4a) and/or the counter-blade (13a) comprises a metal strip.

21. The cutting device according to claim 20, wherein the at least one blade (4a) and/or the counter-blade (13a) comprises a spring steel strip

22. The cutting device according to claim 19, wherein the at least one blade (4a, 13a) is injection molded around its blade back from the guide element (6a, 15a) made of plastic.

23. The cutting device according to claim 1, wherein the at least one blade (4a) and the counter-blade (13a) are relatively biased against each other by spring elements (12a).

24. The cutting device according to claim 23, wherein the spring elements (12a) for biasing the blade (4a) are arranged between the blade support (3a) and a guide element (6a).

25. The cutting device according to claim 24, wherein the spring elements (12a) are formed directly on the blade support (3a) and/or the guide element (6a).

26. The cutting device according to claim 1, wherein the counter-blade is divided into plural axially adjacent segments (13a, 13b, 13c).

27. The cutting device according to claim 26, wherein the counter-blade segments (13a, 13b, 13c) are respectively individually resiliently mounted.

28. The cutting device according to claim 1, wherein the at least one rotating blade (4a) is arranged in a plane having an angle of at most 45° with respect to the rotation axis.

29. The cutting device according to claim 28, wherein the angle is at most 35°.

30. The cutting device according to claim 1, wherein the device is a lawnmower.